## Message

From: Strynar, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5A9910D5B38E471497BD875FD329A20A-STRYNAR, MARK]

**Sent**: 9/26/2018 1:05:46 PM

To: Buckley, Timothy [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=197a3461d9824a17850f34cc2b0b37fe-Buckley, Timothy]; Offenberg, John

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=0cb339db65ae4a229317977de01d0336-Offenberg, John]; Ryan, Jeff

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=c6088fc0757d4bbf825e9b39311e35be-Ryan, Jeff]; Lindstrom, Andrew

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=04bf7cf26aa44ce29763fbc1c1b2338e-Lindstrom, Andrew]; Riedel, Theran

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=9a61de4d9aa9499b8715ace92f20162d-Riedel, The]

**Subject**: RE: stack test info and permit application **Attachments**: Chemours air emissions 2012 - 2016.xlsx

## All,

Based on the report Tim sent the HFPO-DAF (in yellow) is expected to convert to HFPO-DA in water as we expect. In the Chemours emission estimates for 2012 to 2106 there are emission estimates that rival HFPO-DAF in mass that are other acids fluorides (see in green). See attached for more. I expect these also may be trapped and of could be monitored for removal efficiency. In particular one Nafion BP1 sulfonyl fluoride is estimated to be >10x the emission of the HFPO-DAF.

N/	2	r	v

rmation Request Form	3									
CALENDAR YEAR: 2016										
Requested Compound	Name	Requested CASRN	Emitted Campains	Neme	Emitted CASRN	Emission Point ID	Hayear		biday	ibā
C.HFIO)	P73304A	894-133	6.50	District in Phase continue to a finance	030-43-7	NEP-Hor:	24	tt-	0.10	0.80
SHF:G:	CAmpanenter perilanan redorariar arid	277-72-1	0.600	Security States 1213 on Security States Security	425-38-7	NEF-+6d	5	1:	2:00	9.00
CHF <sub>6</sub> O <sub>2</sub>	Commention methods carbonic and	583590-89-8	C.F.O.	C scorette perfuoració fluorde	353338-50-3	7/3	Not believed this was an air emission			
Q:HF::O:	ERFOCIDA SIAN	13202-338	S.F.O.	H-PO-DAF	2302-68-8	NEP-Host	903		4 01	- 5
O/HF-O/	HFFO-DA (Senit)	13252-136	Q.F.XX	HEFOLM	2002-98-0	NEP-H6/2	6		0.02	0.0
OHFIO:	EFFO-DA (Gest)	13252 1138	C.F.C.	HERDIAT	2362-98-9	ASP-A1	22	591	0.13	0.0
O.HFIO.	FEPO-DA-OsciX	1922.138	54F0	:FRO-DA Cardo	13252-13-8	, Α.Ψ⊇ά	3		303	0.2
D.HFrD.	ENTRO DA MASS	13352-139	0.50 84	FFRO-DA sourcesium a 19	82007-80-1	4EP-41	2		0.01	0.0
CHF/O	Complete policies coloreda and	174767.1103	7.00		7/9	7.3	Not believed this was a	n ed emissio	æ	
೧.೫೯-೧.	Consequence (by a cade to be self	274782-26-7	CHF4C	Citorious that print Physicia	38382-77-0	5/8	Not believed this was a	n akremissio	se.	_
C/HFI(C)	PROFINA	19402.913	CF.O.	WOODsC4 and founds	21773.49.1	NEP Hon	74		ે. ઉ	Ŭ.
C/HF101	POADA	59492308	OFW	PROCA scir (Bonde	21703.473	NEP Horis	28 94		1.0	5.
CHE.C.	FCSCA	19/82/892	CFICE	FC9CA acci fisorida	21703-45.7	NEP-Hori			1.0 2.0	0.
CHF/Cr	TROTELS.	38482-887	0.4	WITHA wellower	2103456	16EP +16(1)	962		8.3	٥
೦:∺೯::0::8	NaSio 199	29211-67-9	CHFOS	Notice processes Nation BPI suffere (National)	15082-14-5	MEP Histo	79		3	ō
C/HF;O/S	Notice BBI	2500.4878	CHF.O.S	Notice accesses: Notice BBI referrol Faceute	10000-14-5	NEP-G	8,00		33	
C:8:5-0.8	Nation SQC	745030-2012	CHF.CVS	Nation BSC colfored Carecta	75545-00-6	NEP-Hots	3		0.30	0.
o, <del>ve</del> ,o	El Grit Jacobski	3330-93-2	Colt C	E. decarbant Sect	3220-192	NEE-3	2		0	- 0
OF/O	Carbony Duranta	28,504	0.00	Catopyl/Suprda	252-53-4	18EP +48/5	955		7	٥.
CF./O	Castroni Stoods	353-52-4	QF./Q	Consent Formula	253-52-4	NEP-Hd/2	1369		8.3	3.
CF		***			***	77/9	Not belie ed tris was an air emission			
COHFINDUS	397.6	4790.000	• • •		***	5/9	Not believed this was a	n avremesk	5	
C/HF sO:	IPOA.	38.674	168		5/3	7/3	Not believed this was an ax emission			
CH:50:		39118-716	2249		69006-75-2	NEP-Host	29		- 1	- 5
0.F.0	PSCE performance in processing	10493-433	0.50	TEXT configuration represents	10463-45-3	NEP-Hot	38		83	
0-Fx0	DECEMBER AND ADDRESS OF THE PARTY OF THE PAR	10/83-43/5	0.50	DPVE rearReproving communications	0463-453	NEF-+6/2	1 205		9	- 3
C.F.C	DATE confluencement constants	1197,93.5	CFC	TACE coefficers after the college	1/07/03/5	NEP Hori	5.130		9443	2
0.540	P. T. Seefus control and appro-	1187-33-5	CFX	TACK confinements of very letter	1307-63-1	NEPH62	5.058		32	
ರಿ:F÷⊙	FVE perfusional terration	1601.05.8	O.F.O	IF Electromotracietal	100,000	NEP-Hot	2.2%		35	3
C:FsO	BTA Experiturescent view after	102/3/05/6	Q:Fx0	PPAE (perjamentative pri ether)	36234254	MEP +43/2	11		0	
Q.F.O.3	Soccedered Consociety (Sports	877.674	0503	Phonon Exceldible reported for add	577.07-2	NEP Hon	ş		0.10	0.0
CHF/O	EL HEPO TA decadossi	3330-14-1	0.66.00	EL SERGITA deservoys	2501-14-1	NEP-1	0		- 2	8
O.HFIICO	EL EFFRICA decadossi	3233 14 1	C.44 C.	EL SERD CA deservoirt	2330 14 1	NEP-G	\$2,54:		76	2
C#4,F+0+	S. I. S. Sangellander and S. S. Sangelland, many same	93863-414	SHED	22 Samplement of Committee on survivience	833893-43-4	16EP 446/5	15		2	0.
O.H.F.O.	22.24.06.000.000.22.100.600.000.000.000	53803-434	OHEGO	2.1.2.2 desired companion (C. 2.1.3 describution, resident so tax	25823.43.4	NEP-G	1581		10	ū
0.50	1270	438-58-5	080	HFDC	403.55.5	NEP Hori	42,5:4		342	
0.8.0	HENC	423-76-1	0.50	HEDO	420-59	NEP+62	3 498		14	0
GF:G:K	EFFC Clic codius sed	97798-952	GEOK	HFPO-T/4 continue on b	87118-65-2	(8EF 4467)	Not believed the was a	n akremissis	<i>S</i> 5	
0:F:0:8	EFFO-DA sadeuc sat	57112.75.2	OFOK	HPO DA sidas sid	27118-55-2	MEF H6/2	Not believed this was a			
G/F/O/K	ESPG-DA sadan est	87118-552	OF OK	HERCEA sodow as 8	87188482	4EF-41	Not believed this was a			_

From: Buckley, Timothy

Sent: Tuesday, September 25, 2018 4:45 PM

To: Offenberg, John <Offenberg.John@epa.gov>; Ryan, Jeff <Ryan.Jeff@epa.gov>; Lindstrom, Andrew

<Lindstrom.Andrew@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Riedel, Theran <Riedel.Theran@epa.gov>

Cc: Sullivan, Kate <Sullivan.Kate@epa.gov>

Subject: FW: stack test info and permit application

FYI.

Tim

Timothy J. Buckley, PhD
Director of the Exposure Methods & Measurements Division
National Exposure Research Laboratory
109 TW Alexander Drive
Research Triangle Park, NC 27711

Email: buckley.timothy@epa.gov

URL: http://www.epa.gov/heasd/staff/buckley.html

Phone: (919) 541-2454 (O); FAX: -0239

Ex. 6 Personal Privacy (PP)

From: Abraczinskas, Michael [mailto:michael.abraczinskas@ncdenr.gov]

Sent: Tuesday, September 25, 2018 3:14 PM
To: Kemker, Carol <a href="mailto:Kemker.Carol@epa.gov">Kemker, Carol@epa.gov</a>
Cc: Buckley, Timothy <a href="mailto:Buckley.Timothy@epa.gov">Bubject: stack test info and permit application</a>

Carol and Tim,

Per our discussion today, please find attached the stack test cover letter and the full test report from the testing of the carbon adsorber control efficiencies.

Also, you asked about the thermal oxidizer permit application. It can be found

here: https://files.nc.gov/ncdeq/GenX/Thermal-Oxidizer-Permit-Application-06292018.pdf

We'll be in touch.

-Mike



Mike Abraczinskas, EIT, CPM

Director, Division of Air Quality

North Carolina Department of Environmental Quality

1641 Mail Service Center 919.707.8447 (Office)

Raleigh, NC 27699-1641

Michael Abraczinskas@ncdenr.gov

Ernaf correspondence to and from this address is subject to the North Cardina Public Records Law and may be disclosed to third carties.